January 27, 2012
1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
Fisheries Bureau
Endangered Species Coordinator
Bozeman Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Avenue, Bozeman, MT 59715
Ruby Valley Conservation District, P.O. Box 295, Sheridan, MT 59749
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Lewis and Clark Chapter of Trout Unlimited, P.O. Box 903, Sheridan, MT 59749-0903
Miller Ranch and Cattle Company, P.O. Box 184, Alder, MT 59710

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a project calling for the restoration of a 2,026-foot reach of the Ruby River. The project calls for restoring stream meanders to a historically straightened reach of the Ruby River and lengthening the channel from 2,026 feet to 3,067 feet. The project additionally calls for relocating a feedlot that is encroaching on the river corridor and installing riparian fencing. The intent of the project is to increase aquatic habitat diversity, improve water quality and enhance the riparian vegetative community. Fish populations residing in this reach of the river are expected to increase as a result of the proposed project. The project site is located approximately one mile south of the community of Alder on property owned by the Miller Ranch and Cattle Company in Madison County.

Please submit any comments that you have by 5:00 P.M., February 27, 2012 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer
Habitat Section
Fisheries Bureau
e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Ruby River Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal.

The Future Fisheries Program is proposing to provide partial funding to a project designed to restore a 2,026-foot reach of the Ruby River that had been historically straightened by lengthening the channel and returning meanders to the plan form. The project also calls for relocating some livestock feeding corrals currently encroaching into the riparian corridor. The intent of this project is to enhance aquatic habitat and trout populations, improve water quality and enhance the riparian vegetative community. The project site is located approximately one mile south of the community of Alder in Madison County.

I. Location of Project: This project will be conducted on a reach of the Ruby River located approximately 1 mile south of the community of Alder within Township 6 South, Range 4 West, Sections 16 and 21 in Madison County (Attachment 1). The project site is located on properties owned by the Miller Ranch and Cattle Company.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six year operations plan for the fisheries program is to "restore and enhance degraded habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help meet this goal.

The entire lower Ruby River, from Ruby Reservoir Dam to the mouth, has been listed on the 303d list (federal Clean Water Act) of impaired streams for excessive sediment, water temperature and nutrient loading. Portions of the river, including the reach located on the Miller Ranch, historically were straightened and stripped of riparian vegetation to increase agricultural efficiency. Additionally, an existing feedlot system encroaches into the riparian corridor. This reach of the Ruby River currently supports very low densities of primarily brown trout. The Miller Ranch landowners now recognize the value of habitat diversity and water quality improvements in the Ruby River and are interested in restoring this straightened reach of river back to its historic meanders. This proposed project would return this reach of the river back to a natural plan form, enhance the riparian vegetative community and relocate an existing feedlot further away from the river.

III. Scope of the Project:

This project calls for restoring the natural plan form of a 2,026-foot reach of the Ruby River that had been historically straightened (Attachment 2). The proposed new channel would be lengthened to 3,067 feet, with a sinuosity of 1.8 and a slope of 0.35%. As part of the fundamental design of the new channel, overflow flood channels would be constructed in a manner to become activated at or near the 2-year discharge event. The overflow channels would be installed on the inside of constructed meander bends, as

well as incorporate portions of the old channel proposed for abandonment. Newly constructed outside meander bends would be stabilized with a cobble toe overlain by willow cuttings and wetland sods encapsulated in a woven coir geo-textile blanket, followed by one or two additional sod lifts. The last lift would extend back to the terrace, creating a floodplain bench that would be at least 15 feet wide. Mature willow clumps would be transplanted onto the floodplain benches. River banks at riffle crossovers would be stabilized using similar wetland sod lifts, without the creation of a floodplain bench. Channel plugs would be installed into portions of the old, abandoned channel using construction techniques similar to the proposed bank stabilization, with the exception that they would be bedded on a 10-foot long, 3 to 10 inch cobble platform. Willows and donor sod would be harvested on the landowner's property. The proposed project also involves the relocation of some livestock feeding corrals to provide room for the new channel construction, as well as the installation of approximately 7,000 feet of riparian fencing. A riparian management plan would be implemented to ensure the establishment of a healthy riparian buffer from existing agricultural lands.

This project is expected to cost $469,101.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $40,661.00. The remaining funding would come from other sources and from in-kind services, including:

Contributor	In-kind service	In-kind cash
Landowners	$29,000.00	$71,000.00
MT DEQ 319 Program		$58,417.00
Ruby Valley CD	$7,000.00	
NRCS		$209,773.00
FWP and others	$7,000.00	

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

This reach of the Ruby River currently supports very low densities of primarily brown trout. Restoring the historic plan form of a straightened reach of the river is expected to improve aquatic habitat diversity and increase existing fish populations. The proposed riparian re-vegetation efforts are expected to enhance habitat for riparian dependent wildlife.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the active channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local

conservation district and the U.S. Army Corp of Engineers will be contacted to determine the requirements to meet the federal Clean Water Act (404 permit). In the long term, water quality is expected to be improved by reducing stream bank erosion rates within this reach of the river and by relocating existing livestock feeding corrals further away from the river.

3. Geology, soil quality and moisture.

Soils within the footprint of the project area would be disturbed during construction (approximately 6 acres), but would be stabilized using coir fabric and with extensive re-vegetation (seeding and the planting of riparian shrubs and trees).

4. Vegetation cover, quantity and quality.

Vegetation within the footprint of the project area would be disturbed during construction, primarily involving non-native grasses. Re-vegetation efforts and implementation of a riparian management plan would mitigate for this disturbance.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. The project is expected to be completed in approximately 3 weeks. In the long term, aesthetics would be enhanced by restoring a degraded reach of stream to a healthier and more natural stream environment.

7. Historic and archaeological sites

The proposed project may require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations. Future Fisheries funding will not be made available until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

The intent of the project is to improve aquatic habitat diversity within a historically straightened reach of the Ruby River. The project is expected to improve water quality and enhance populations of coldwater fish. The landowners allow public access for fishing by permission and the project site is located near a downstream FWP fishing access site.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no funding was provided, the applicant would have to either seek additional sources of funding to

complete the project or this portion of the Ruby River would remain degraded. Water quality would continue to be impaired from excessive stream bank erosion and runoff from adjacent livestock feeding corrals. Vegetation within the riparian corridor also would remain degraded.

2. The Proposed Alternative

The proposed alternative is designed to restore the plan form of a historically straightened reach of the Ruby River, increasing overall stream length by about 1,000 feet and improving floodplain connectivity. This alternative would reduce excessive bank erosion, improve water quality, enhance aquatic habitat and fish populations, and improve the riparian vegetative community.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The project application to the Future Fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Park webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and funding will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on February 27, 2012.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Section
Fisheries Bureau
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620
Telephone: (406) 444-2432
e-mail: mlere@mt.gov

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Ruby River Channel Restoration Project

Division/Bureau Fisheries Bureau -Future Fisheries Improvement

Description of Project The Future Fisheries Improvement Program is proposing to provide partial funding to a project designed to restore a 2,026-foot straightened reach of the Ruby River by returning the channel back to its historic meander pattern. The intent of the project is to improve water quality and fish populations within this river reach and enhance the riparian vegetative community. The project site is located approximately 2.5 miles west of the community of Alder in Madison County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites					X	X

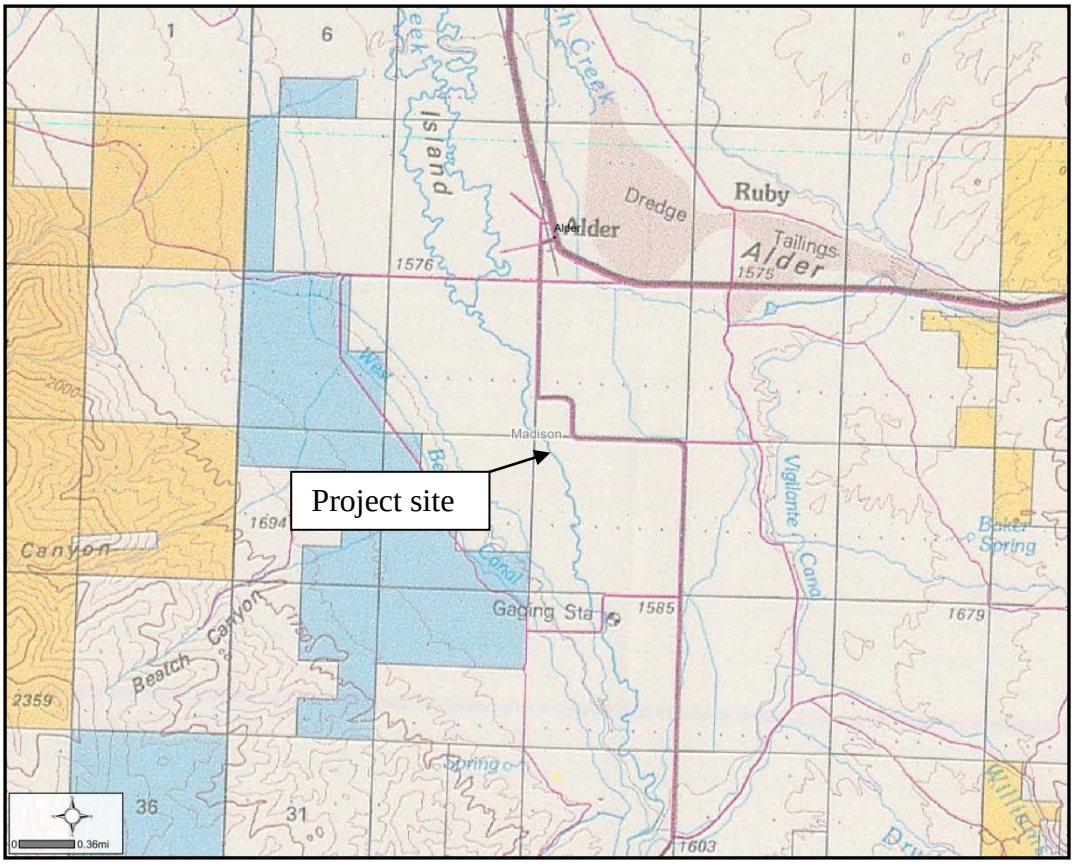
POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

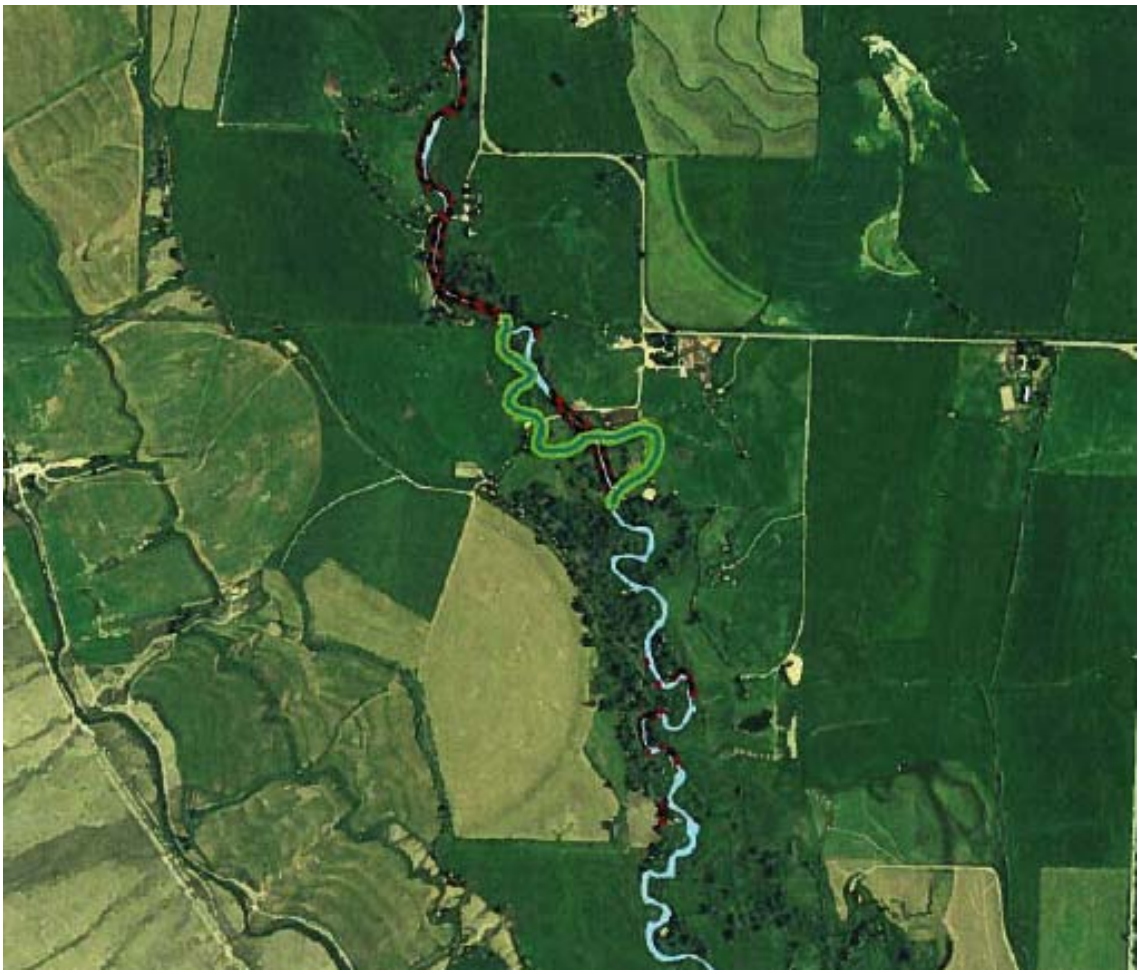
Other groups or agencies contacted or which may have overlapping jurisdiction Ruby Valley Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

Individuals or groups contributing to this EA Ruby Valley Conservation District; Gillilan Associates.

Recommendation concerning preparation of EIS No EIS required.
EA prepared by: Mark Lere
Date: January 12, 2012



Map showing location of project site on the Ruby River
ATTACHMENT 1



ATTACHMENT 2